33. *Waxy Degeneration.*—This peculiar change in organs has been recently made the subject of discussion in the Physiological Society of Edinburgh. It is observed in the spleen, the kidneys, and liver, and indicates an important constitutional cachexy. The organ affected with it is firm, its section is smooth, and its feel hard like wax.

In the *liver*, studied microscopically, according to Dr. W. T. GAIRDNER, there is a change in the entire structure, but chiefly in the glandular epithelia, which are compressed, irregular in form, and have atrophied nuclei. They are also altered in a manner which can hardly be described but easily recognized after being once seen, presenting a peculiar *horny* refraction, and giving the idea of a substance much denser and more resistant than the normal elements of which these cells are composed. Sometimes the cells cohere in masses, sometimes they are very small, at others as large as the ordinary cells.

In certain forms of Bright's disease of the *kidney*, a precisely similar alteration takes place in the histological elements of that organ; but here, the vessels, and particularly the arteries and the Malpighian tufts, are the first portions distinctly affected.

In the *spleen*, on the other hand, the most marked change is in the contents of the sacculi. This change in the albuminous tissues is not always confined to the original structures of the body: old deposits in serous membranes and tubercle often exhibit it, and even cancer sometimes undergoes this change, when the cancer cells cannot be distinguished from those of the liver, except by their lighter colour.

In the spleen, according to Dr. Sanders, under a power of 250 diameters, the nature of the waxy degeneration can be distinctly seen in their sections. The Malpighian bodies, forming rounded transparent granulations, appear as clear spaces surrounded by the red pulp. The normal corpuscles of these bodies are found converted into, and replaced by masses of a colourless, dense, highly translucent, homogeneous material. At first, these masses appear to exhibit no structure of any kind; but, on careful examination, the outlines of irregular cells may be discerned.

This "waxy degeneration" is a pathological change of great importance. It is not now observed or noticed for the first time, but is well worthy of a more careful study than has hitherto been bestowed on it.—*Assoc. Med. Journ.* March 24, 1854.

34. *Metastasis, in its Practical Bearings.*—Mr. HUNT read a paper on this subject before the Medical Society of London (April 22, 1854), the object of which was to inquire in what manner, and to what extent, the knowledge of such a principle or contingency should modify or restrain the practice of the physician and the surgeon. He (Mr. Hunt) stated that metastasis did not appear to be well understood, and that a doctrine had been deduced from it which appeared to have no rational foundation. Authors of repute had described certain local diseases which were known to be subject to metastatic changes as being salutary or protective to the system, so that they could not be cured without danger to more important organs. The diseases thus described as "salutary" had no pathological character peculiar to themselves, but it happened that they were all, to a certain extent, difficult of cure. They were—gout, asthma, hæmorrhoids, fistula, ulcers of the legs, otorrhœa, and certain chronic eruptions. It had been argued that, as we were able to relieve internal congestion by external counter-irritation or artificial discharges, so the suppression of spontaneous morbid irritation or discharge was liable to induce disease of the viscera. But this opinion was contrary to physiological principles, and it was not supported by facts. Still, in certain patients of weak constitution and peculiar idiosyncrasy, it did occasionally happen that disease of the surface suddenly receded, and the head, heart, lungs, or some other organ, became affected; and the question for discussion was, whether, in cases where there was reason to apprehend metastatic action, it was best to leave the disease alone, or whether there was any safe mode of treating it. Where metastasis had resulted as an apparent consequence of medical or surgical treatment, it might be suspected that the treatment was improper. Thus, the immersion of a gouty foot in cold

water had been followed by hemiplegia. Such metastasis probably would not have occurred had the attack of gout been treated constitutionally; and this principle would apply in all cases. Local diseases, and especially the eruptive, should be treated by careful attention to the state of the general health. Even in local diseases of local origin, the health might become secondarily affected, and it might then be unsafe to rely on local remedies. It had rarely occurred to him (Mr. Hunt) to meet with a case of skin disease, or ulcer, or fistula, in which the general health had improved under the progress of the local disease. The reverse very commonly occurred: patients suffered in their general health in consequence of local irritation, and recovered when the source of that irritation was removed. Still, in all cases, it was better to treat local disease by internal remedies, of which evacuants should form a chief part. Under this practice, he (Mr. Hunt) has never once seen the recession of eruptions or the healing of ulcers followed by any consequences of a serious nature. On the contrary, if the health had been previously in any degree deranged, it had generally been found much improved by the treatment. The author observed, however, that in those rare cases in which a strong disposition to metastasis existed, there was some peculiarity of constitution in the patient which resisted the ordinary influence of medicine. These cases, being rare, often found their way into print, and therefore became apparently more numerous than they really were. But their practice must be guided, not by the exception, but by the million of cases which follow the general rule; and we might greatly question the existence of any "salutary" disease, which, as a safeguard to health, demanded a moment's consideration at their hands.—*Lancet*, April 29, 1854.

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35. *Fatal Effects of imperfect Union of the Umbilical Vein after Childbirth; Jaundice as the Result of the imperfect closure of the Ductus Venosus.*—Mr. Henry Lee read to the Physiological Society March 18, 1854, the particulars of two cases, one under the care of Mr. Willing, of Hampstead: the other under the care of Dr. Herapath, of Bristol. In the first, jaundice was the most prominent symptom, and commenced immediately after birth. Six days after the separation of the funis (in which process there was nothing abnormal), slight hemorrhage made its appearance. The blood passed was of a thin serous character, scarcely discolouring the linen upon which it was received, and, when dry, not stiffening it. The bleeding continued for two days in spite of every attempt to avert it. It then stopped after the umbilicus had been plugged by cobweb. The little patient, however, shortly afterwards sank. On a *post-mortem* examination, the umbilical vein, one umbilical artery, the ductus venosus, the ductus arteriosus, and the foramen ovale, were all found open. No coagula were found in any part of the body, and the blood discharged from the vessels, both before and after death, had evidently lost its power of coagulation. It appeared entirely deficient in fibrin. There was no appearance of inflammation of the lining membrane of the umbilical vein, although the structures around, near the umbilicus, were somewhat condensed and thickened. The jaundice in this case was attributed by Mr. Lee to the blood from the vena porta having passed through the ductus venosus instead of circulating through the liver. When the natural circulation through the ductus venosus at childbirth ceases, if that vessel remains open, it affords a ready passage to the blood from the portal system, and thus the blood from which the bile should be secreted may never get to the liver at all. Under such circumstances, the bile would necessarily accumulate in the system. Instances have been related in which the secretion of bile went on perfectly well where there was no vena porta; but there were cases in which the hepatic artery was very much larger than natural, and supplied the amount of blood required for secretion as well as for nutrition. In Dr. Herapath's case, some blood escaped from the umbilicus at the time the penis separated, and shortly after birth the child became jaundiced. It was subsequently attacked with erysipelas, and secondary deposits formed in various parts, but not in the lungs. This was accounted for by Dr. Herapath, from the circumstance, discovered on a *post-mortem* examination, that the foramen ovale had remained open. It was therefore thought that the vitiated stream of blood from the lower cava had